



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,944	02/10/2006	Hiroshi Fukukita	108731847USWO	4565
53148	7590	05/12/2009	EXAMINER	
HAMRE, SCHUMANN, MUELLER & LARSON P.C. P.O. BOX 2902-0902 MINNEAPOLIS, MN 55402			HOFFA, ANGELA MARIE	
ART UNIT	PAPER NUMBER			
	3768			
MAIL DATE	DELIVERY MODE			
05/12/2009	PAPER			

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/567,944	FUKUKITA, HIROSHI	
	Examiner	Art Unit	
	Angela M. Hoffa	3768	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 25 February 2009.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-6 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-6 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 10 February 2006 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) Notice of Informal Patent Application

6) Other: _____.

DETAILED ACTION

1. This office action is in response to communication filed on February 25, 2009.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,238,346 B1 to Mason.

Regarding Claim 1, Mason discloses an ultrasonic diagnostic apparatus comprising an electroacoustic conversion unit including electroacoustic conversion devices with M row and N columns (Abstract, Lines 1-6; "transducer elements 14"), which sub-arrays are arranged at least two-dimensionally with J rows and K columns, each of the sub-arrays including electroacoustic conversion devices with m rows and n columns, where $M = m \times J$, $N = n \times K$ (Abstract, Lines 9-13; "sub-array 16"); intra-group processors with J rows and K columns provided corresponding to the respective sub-arrays ("switches 26, 28, 30, 42, 44,46", Figure 1, Col. 4, Lines 34-35); and a selection unit capable of selecting intra-group processors with j rows and k columns as a target from the intra-group processors with J rows and K columns, the selection being performed while shifting the selection target of the intra-group processors in a column direction ("controller 24", Col. 3, Lines 30-37).

Regarding Claim 2, Mason further discloses an ultrasonic diagnostic apparatus wherein the selection unit is capable of selecting intra-group processors with j rows and k columns as a target from the intra-group processors with J rows and K columns, the selection being performed while shifting the selection target of the intra-group processors in a row direction ("controller 24", Col. 3, Lines 30-37; Col. 4, Lines 22-26).

Regarding Claim 3, Mason further discloses an ultrasonic diagnostic apparatus wherein the selection unit comprises a reception switch that selectively connects a reception signal from the intra-group processors with a reception beam former ("receiver 50", "output bus arrangement", Col. 3, Lines 19-20, 60- 64).

Regarding Claim 4, Mason further discloses an ultrasonic diagnostic apparatus wherein the selection unit comprises a data switch that selectively supplies group focus data to the intra-group processors ("transmitter 22", "bus 32", Col. 3, Lines 25-37).

Regarding Claim 5, Mason further discloses an ultrasonic diagnostic apparatus wherein the selection unit comprises a power supply switch that selectively supplies a group power supply to the intra-group processors ("transmitter 22", "controller 24", Col. 3, Lines 21-27).

Regarding Claim 6, Mason further discloses an ultrasonic diagnostic apparatus wherein the selection unit comprises a clock switch that selectively supplies a clock signal to the intra-group processors ("controller 24", "signal pulse phasing", Col. 3, Lines 4-25).

Response to Arguments

4. Applicant's arguments have been fully considered but they are not persuasive.

In response to Applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the feature upon which applicant relies (i.e., the intra-group processors supplying and receiving signals to and from the electroacoustic conversion devices) is not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). However, let it be pointed out that in the *Mason* reference, in Column 4, Lines 33-35 discusses an embodiment wherein the switches are used for both transmitting and receiving functions.

Although Applicant argues that the reference does not show intra-group processors (switches 26, 28, 30, 42, 44, 46, Fig. 1 of *Mason*) arranged with J rows and K columns, each switch is associated with buses (buses 40, Fig. 1) which correspond to N x X transducer elements (Col. 3, Lines 39-65). The area controlled by the switch 26 and represented by the N x X transducer elements of *Mason* pictured in Figure 1 can be considered equivalent to the first intra-processor area for the subarray of elements corresponding to coordinates of the claimed J x K subarray. Similarly, the N x X area controlled by switch 28 in Figure 1 of *Mason* and its corresponding buses can be considered the second intra-processor area for the subarray corresponding to coordinates of the claimed J x K subarray. In this scenario, the value of K is one.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela M. Hoffa whose telephone number is 571-270-7408. The examiner can normally be reached on Monday - Friday, 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on 571-272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. M. H./
Examiner, Art Unit 3768

/Long V Le/
Supervisory Patent Examiner, Art Unit 3768